

## II. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings.

1. (Currently Amended) A computer-based implementation of a method for determining one or more best matching resources, given a resource x and role F, in [[an]] a hierarchical matrix-based workflow model, said method comprising:

- a) ~~identifying in a matrix based workflow an organizational unit where said resource x belongs;~~
- ~~b) identifying all super roles of said role F, if no super roles exist;~~
- ~~c) returning best matching resource as x if role F is a hierarchical role, else;~~
- ~~d) iteratively identifying a parent role from said list of super roles based on at least one search criterion narrower than was used to identify all super roles;~~
- ~~e) identifying a current role R from said iteratively identified parent role;~~
- ~~f) identifying in said organizational unit all resources, other than said resource x, that has said current role R, and if there is at least one identified resource, then returning said identified resource(e) as best matching resource, else;~~
- ~~g) identifying all servicing organizational units for said current role R, and~~
- ~~h) repeating steps e g, until all best matching resources are returned.~~
- a) identifying in a hierarchical matrix-based workflow an organizational unit where resource x belongs;
- b) identifying all hierarchically-superior roles of role F;
- c) in the case that no hierarchically-superior roles of role F exist, returning x as the best matching resource;

\_\_\_\_\_ d) \_\_\_\_\_ in the case that a hierarchically-superior role of role F exists, iteratively identifying an immediately hierarchically-superior role from the list of all hierarchically-superior roles;

\_\_\_\_\_ e) \_\_\_\_\_ identifying a role R of the immediately hierarchically-superior role;

\_\_\_\_\_ f) \_\_\_\_\_ identifying in the organizational unit all resources other than resource x that has role R;

\_\_\_\_\_ g) \_\_\_\_\_ in the case that there is at least one identified resource other than resource x that has role R, returning the at least one identified resource as the best matching resource;

\_\_\_\_\_ h) \_\_\_\_\_ in the case that there is not at least one identified resource other than resource x that has role R, identifying all servicing organizational units for role R; and

\_\_\_\_\_ i) \_\_\_\_\_ repeating steps e through h until all best matching resources are returned.

2. (Currently Amended) [[A]] ~~The computer based implementation of a method for determining one or more best matching resources, given a resource x and role F, as per claim 1, wherein~~ [[if]] in the case that no servicing organization units are found in step [[g]] h, said method further implementing the following steps the method further comprises:

[[i]] j) escalating the list of ~~super~~ hierarchically-superior roles and identifying a new ~~current~~ role R;

[[j]] k) repeating said steps e-[[h]] i for ~~said the~~ new ~~current~~ role R and returning the best matching resources, and

[[k]] l) identifying all ~~parent~~ immediately hierarchically-superior organizational units (~~OUPs~~) of ~~said the~~ organizational unit and repeating steps e-[[h]] i with ~~said OUPs~~ the immediately hierarchically-superior organizational units as ~~current the~~ organizational unit and returning the best matching resources.

3. (Currently Amended) [[A]] ~~The computer-based implementation of a method for determining one or more best matching resources, given a resource x and role F, as per claim 2, wherein~~ if in said step k, in the case that no best matching resources are identified at step l, said method further comprises the step of the method further comprises:

m) identifying all organizational units (~~OUPs~~) with R as a global rule, and

n) repeating steps e-[[h]] i with ~~said OUPs~~ the organizational units identified at step m as ~~current the~~ organizational unit, and returning best matching resources.

4. (Currently Amended) ~~[[A]] The computer based implementation of a method for determining one or more best matching resources, given a resource x and role F, as per~~ claim 1, wherein ~~said the hierarchical matrix-based workflow matrix organization model~~ is a three-dimensional ~~model~~ workflow comprising the following axes: organizational unit, title hierarchy, and functional roles.

5. (Currently Amended) ~~[[A]] The computer-based implementation of a method for determining one or more best matching resources, given a resource x and role F, as per~~ claim 1, wherein ~~said the~~ method is network enabled, ~~said the~~ network comprising any of the following: local area network (LAN), wide area network (WAN), Internet, HTTP-based network, or PSTN/PBX network.

6. (Currently Amended) A system for automated network-enabled workflow management in a hierarchical matrix organizational model, said hierarchical organizational model comprising one or more organizational units, said system comprising:

a) one or more databases storing information regarding design elements required for creating an application, definitions of organizational models, and workflow rules;

b) a search engine interfacing with said one or more databases and utilizing said stored information to determine workflow routing in a matrix organizational model, the search engine having:

a role extractor for identifying all roles associated with said organizational models;

a functional link extractor for identifying all functional links associated with said organizational model;

an inherited link extractor for identifying all links of hierarchically-superior roles associated with said organizational model, and

a matcher for identifying appropriate recipient(s) by matching said workflow requests to said roles in organizational models while traversing a hierarchical tree of said organizational unit, and other organizational units based on said identified functional and inherited links; and

c) a router polling said one or more databases to retrieve workflow requests, and directing said workflow requests to appropriate recipient(s) based on said search

engine determinations, wherein the appropriate recipient(s) may include recipients in other organizational units.

7. (Cancelled)

8. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per of claim 6, wherein said the~~ hierarchical matrix organizational model is a three dimensional model and said three dimensions comprise the following axes: organizational unit, title hierarchy, and functional roles.

9. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per of claim 6, wherein information~~ regarding said design elements in ~~said the hierarchical~~ organizational models ~~is are~~ imported in any one of, or combination of, the following ways: via a local database, via a remote database, imported from an address book or imported from another organizational model.

10. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per of claim 6, wherein said network~~ comprises any of the following: local area network (LAN), wide area network (WAN), Internet, HTTP-based networks, or PSTN/PBX network.

11. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said search engine is a rules based search engine.

12. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said one or more databases with definitions of organizational models further comprises definitions of hierarchy, structure and function associated with organizational models.

13. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said system further comprises a statistical analyzer providing a complete statistical analysis of workflow processing including means for tracking workflow cycles by date, event, requestor, or workflow actor.

14. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said system further comprises an automated delegation system that allows users to delegate tasks for re-routing events for temporary process changes.

15. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said router is a JAVA servlet.

16. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said workflow rules are stored in a separate database.

17. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said workflow management is externalized from applications created using said information in said one or more databases.

18. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said definitions of organizational models further include definitions of functional links that extend said workflow process across organizations without defining hierarchical links.

19. (Currently Amended) ~~[[A]] The system for automated network-enabled workflow management in a matrix organizational model, as per~~ of claim 6, wherein said search engine follows as many links as needed to resolve said workflow requests by traversing a hierarchical tree of said organizational units in said organizational model, and identifying functional links to other organizations that service said organizational units.



20. (Currently Amended) A method for automated network-enabled workflow management in a hierarchical matrix organizational model using an intelligent search engine, ~~said the hierarchical matrix~~ organizational model comprising one or more organizational units, said method comprising:

polling one or more databases for one or more work flow requests;

receiving said one or more workflow requests;

identifying appropriate recipient(s) in a hierarchical matrix organizational model with regard to said one or more workflow requests using an intelligent search engine, based on information stored in said one or more databases regarding design elements required for creating an application, definitions of organizational models, and workflow rules, the intelligent search engine being operable to:

identify all roles associated with said organizational models;

identify all functional links associated with said organizational model;

identify all links of hierarchically-superior roles associated with said organizational model; and

identify appropriate recipient(s) by matching said workflow requests to said roles in organizational models while traversing a hierarchical tree of said organizational unit and other organizational units based on said identified functional and inherited links;

and

forwarding said one or more requests to said identified appropriate recipient(s) in ~~said the hierarchical~~ matrix organizational model, wherein the appropriate recipient(s) may include recipients in other organizational units.

21. (Cancelled)

22. (Currently Amended) ~~[[A]] The method for automated network enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 20, wherein ~~said the hierarchical~~ matrix organizational model is a three dimensional model comprising the following axes: organizational unit, title hierarchy, and functional roles.

23. (Currently Amended) ~~[[A]] The method for automated network enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 20, wherein information regarding said design elements in said organizational models ~~is are~~ imported in any one of, or a combination of, the following ways: via a local database, via a remote database, imported from an address book or imported from another organizational model.

24. (Currently Amended) ~~[[A]] The method for automated network enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 20, wherein said network comprises any of the following: local area network (LAN), wide area network (WAN), Internet, HTTP-based networks, or PSTN/PBX network.

25. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~  
of claim 20, wherein said search engine is a rules based search engine.

26. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~  
of claim 20, wherein said method further performs a complete statistical analysis of workflow processing including means for tracking workflow cycles by date, event, requestor, or workflow actor.

27. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~  
of claim 20, wherein said method further allows users to delegate tasks for re-routing events for temporary process changes.

28. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~  
of claim 20, wherein said workflow rules are stored in a separate database.

29. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 20, wherein said definitions of organizational models further include definitions of functional links that extend said workflow process across organizations without defining hierarchical links.

30. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 20, wherein said search engine follows as many links as needed to resolve said workflow requests by traversing a hierarchical tree of said organizational units in said organizational model, and identifying functional links to other organizations that service said organizational units.

31. (Currently Amended) A method for automated network-enabled workflow management in a hierarchical matrix organizational model using an intelligent search engine, said hierarchical matrix organizational model comprising one or more organizational units, said method comprising:

polling one or more databases for one or more work flow requests;

receiving said one or more workflow requests;

identifying appropriate recipient(s) in a hierarchical matrix organizational model with regard to said one or more workflow requests, based on information stored in said one or more databases regarding design elements required for creating an application, definitions of organizational models, and workflow rules, wherein the appropriate recipient(s) may include recipients in another organizational unit;

said step of identifying appropriate recipient(s) further comprises identifying all roles, functional links, and ~~inherited~~ links of hierarchically-superior roles associated with said hierarchical matrix organizational model[[s]], and identifying appropriate recipient(s) by matching said workflow requests to said roles in the hierarchical matrix organizational model[[s]] while traversing a hierarchical tree of said organizational unit and other organizational units based on said identified functional links and ~~inherited~~ links of hierarchically-superior roles, and

forwarding said one or more requests to said identified appropriate recipient(s) in ~~said~~ the hierarchical matrix organizational model.

32. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 31, wherein ~~said the hierarchical~~ matrix organizational model is a three dimensional model comprising the following axes: organizational unit, title hierarchy, and functional roles.

33. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 31, wherein information regarding said design elements in said organizational models ~~is~~ are imported in any one of, or a combination of, the following ways: via a local database, via a remote database, imported from an address book or imported from another organizational model.

34. (Currently Amended) ~~[[A]] The method for automated network-enabled workflow management in a matrix organizational model using an intelligent search engine, as per~~ of claim 31, wherein said workflow rules are stored in a separate database.